

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

To:

see form PCT/ISA/220

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/GB2004/004637

International filing date (day/month/year)  
04.11.2004

Priority date (day/month/year)  
14.11.2003

International Patent Classification (IPC) or both national classification and IPC  
A01M13/00, A01N53/00

Applicant  
RECKITT BENCKISER (AUSTRALIA) PTY LIMITED

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 65.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

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10/579122

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2004/004637

AD20060510  
IN 20060510 12 MAY 2006

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/GB2004/004637

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**Box No. II Priority**

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1. ☒ The following document has not been furnished:

- ☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).
- ☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
4. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	1-31
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-31
Industrial applicability (IA)	Yes: Claims	1-31
	No: Claims	

2. Citations and explanations

**see separate sheet**

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**Box No. VI Certain documents cited**

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1. Certain published documents (Rules 43*bis*.1 and 70.10)

and / or

2. Non-written disclosures (Rules 43*bis*.1 and 70.9)

**see form 210**

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2004/004637

**1AP20Rec'd PCT/PTO 12 MAY 2006****Re Item I****Basis of the report**

The documents mentioned herein are numbered in accordance with the order they appear in the International Search Report.

**Re Item V****Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The present invention relates to combustible material containing bifenthrin as active ingredients for killing mosquitoes.

It is assumed that all claims enjoy priority rights from the filing date of the priority document. If it later turns out that this is not correct, the document D1 (see Item VI below) could become relevant in the national/regional phase to assess whether claims 1-31 satisfy the criteria set forth in Article 33 PCT.

None of the documents D2-D4 disclose combustible material for dispensing bifenthrin. Novelty is thus acknowledged (Art.33(2)PCT).

The subject-matter of the present claims has 2 relevant aspects to be evaluated for assessing inventive step (Art.33(3)PCT): the fact that bifenthrin is used in fumigators instead of the classical volatile pyrethroids and the formulation parameters.

Having regard to the use of bifenthrin, the applicant submitted that the use of a non volatile pyrethroid in general was not disclosed at the relevant date. D2 mentions some pyrethroids for use in smoke fumigants, e.g. cypermethrin, permethrin and deltamethrin, which the applicant acknowledged as non volatile. D3 discloses the possible simultaneous use of such non volatile pyrethroids and even of bifenthrin. D4 describes the use of bifenthrin for fumigation. The application (table 5) contains a summary of some data about volatile and non volatile pyrethroids. Bifenthrin is clearly the most active. So one skilled in the art would have selected it, unless a major prejudice would have had to be overcome. This prejudice could be linked to the low volatility or to the decomposition over 170°C, but D3 and D4 unambiguously teach that this possible prejudice has been overcome before the relevant date.

Having regard to the formulation parameters, i.e. the presence of an accelerator, of a regulator/retardant, etc. the prior art provides sufficient information for their use. It is pointed out that each component is known for a specific role, that this role is the one for which it has been selected in the present invention and that this constitutes a juxtaposition of means which do not cooperate with/influence each other. As to the relative amounts of the components present, although the exact values can't be found as such in the cited prior art, it is within the artisan's skills to optimize these values. So far, no unexpected effect due to specific formulation parameters have been substantiated.

The present application does thus not fulfill the criteria of Article 33(3) PCT, because the claimed subject-matter does not involve any inventive step (Rule 65(1) and (2) PCT).

**Re Item VI**

**Certain documents cited**

Certain published documents

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO 2004/031104	15.04.2004	02.10.2003	02.10.2002